

(11) **EP 2 405 263 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **27.02.2013 Bulletin 2013/09**

(51) Int Cl.: **G01N** 27/22 (2006.01)

G01N 33/487 (2006.01)

(43) Date of publication A2: 11.01.2012 Bulletin 2012/02

(21) Application number: 11171345.9

(22) Date of filing: 24.06.2011

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR Designated Extension States:

BA ME

(30) Priority: 08.07.2010 GB 201011474

(71) Applicant: Aber Instruments Ltd Ceredigion SY23 3AH (GB)

(72) Inventor: Todd, Robert Powys, SY20 8QG (GB)

(74) Representative: Davies, Gregory Mark Urquhart-Dykes & Lord LLP 7th Floor Churchill House Churchill Way Cardiff CF10 2HH (GB)

(54) Analysis of a dielectric medium

(57) A method of dealing with the electrode polarization error when analyzing a dielectric test medium is achieved by firstly applying an excitation current to the test medium at a test frequency, by means of a first electric couple (23, 24) comprising excitation electrodes (23, 24). Next the voltage across the excitation electrode couple (23, 24) is measured and the voltage across a second

couple of electrodes (25, 26) is also measured. The measured voltages across the first and second electrode couples are compared in order to derive a polarization correction factor which is used to provide a corrective value for the capacitance, or conductivity measurement. The method is suitable for use in industrial on-line applications.

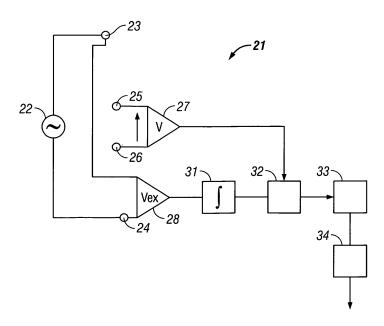


FIG. 2

EP 2 405 263 A3



EUROPEAN SEARCH REPORT

Application Number EP 11 17 1345

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
А	US 3 665 302 A (LEE 23 May 1972 (1972-6 * the whole documer	5-23)	1-15	INV. G01N27/22 G01N33/487
А	WO 88/02115 A1 (KEL 24 March 1988 (1988 * page 9, line 20 - figure 5 *	L DOUGLAS B [GB] ET AL -03-24) page 12, line 9;) 1-15	
Α		surement of tivity", E. SCIENTIFIC BLISHING, BRISTOL, GB, une 1981 (1981-06-01), 0016533, II: 4/6/005	1-15	
				TECHNICAL FIELDS
				GO1N
				G01R
			\perp	
	The present search report has	·	1	
	Place of search	Date of completion of the search	7.	Examiner Markus
	The Hague	22 January 2013		verger, Markus
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot ument of the same category inological background written disclosure rmediate document	L : document cited	ocument, but pul ate in the applicatio for other reason	olished on, or on s

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 11 17 1345

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

22-01-2013

3665302 A 8802115 A1	23-05-1972		928389 2007964	Δ1	
8802115 A1		IS JP 5 NO SE	1262749 1904 44023600 135383 378456 3665302	A1 A A7 B B B	12-06-19 03-09-19 02-02-19 25-08-19 15-08-19 20-12-19 01-09-19 23-05-19
OCCUPATION NA	24-03-1988	CA EP NZ US WO	593387 7881087 1261393 0281602 221878 4810650 8802115 8706972	A A1 A1 A A A1	08-02-19 24-03-19 26-09-19 14-09-19 27-09-19 07-03-19 24-03-19 22-03-19